CLAIMS:

1.   A system for determining a military threat level associated with a collection of detected objects imaged within a geographical area of interest, the system comprising:

a)   a data detector for detecting and imaging objects located within the geographical area of interest;

b)   a threat intensity detector for determining the intensity of detected objects within the area of interest; and

c)   a threat immediacy detector for determining the immediacy of a threat posed by the detected objects based on an organizational pattern of the detected objects.

2.   The system of Claim 1, wherein the threat intensity detector generates a density image.

3.   The system of Claim 2, wherein the threat immediacy detector comprises:

a)   an automatic shape recognition module for comparing the density image to a predefined set of templates, each of the templates being representative of an organizational pattern and determining a most likely formation based on the comparison of the density image to the predefined set of templates; and

b)   an inference reporter for reporting the most likely formation in terms of the immediacy of the threat posed by the detected objects.

4.   The system of Claim 3, wherein a plurality of configurations are defined for each template in the predefined set of templates.

5.   The system of Claim 4, wherein the automatic shape recognition module compares the density image to each of the configurations defined for each template in

the predefined set of templates.

6.   The system of Claim 5, wherein the configurations defined for each template in the predefined set of templates are based on at least one parameter.

7.   The system of Claim 6, wherein the at least one parameter comprises at least one external parameter.

8.   The system of Claim 7, wherein the at least one external parameter comprises:

a)   position;

b)   orientation; and

c)   scale.

9.   The system of Claim 6, wherein the at least one parameter comprises at least one internal parameter which is unique to each of the templates.

10.   The system of Claim 3, wherein there are a plurality of most likely formations.

11.   The system of Claim 1, wherein the templates comprise:

a)   a wedge template;

b)   an echelon template;

c)   a column template; and

d)   a vee template.

12.   A method for determining a military threat level associated with a collection of detected objects located within a geographical area of interest, the method comprising:

a)   defining a set of formation templates, wherein each formation template is representative of an organizational pattern and comprises a plurality of cells;

b)   defining a plurality of configurations for each of the formation

templates;

    c)   defining the geographic area of interest;

    d)   detecting the collection of objects within the geographical area of interest, wherein each detected object in the collection of detected objects has a geographical location;

    e)   creating a density image based on the geographical locations of the collection of detected objects;

    f)   identifying sections of the density image that are too sparse to contain a formation;

    g)   determining a probability of finding points in each of the formation template cells for each of the configurations of each of the formation templates;

    h)   determining a probable formation based on the probability of finding points in each of the template cells for each of the configurations of each of the formation templates, wherein the probable formation is indicative of the threat of the collection of detected objects; and

    i)   reporting the probable formation.

13.   The method of Claim 12, further comprising determining a strength of the threat based on a density of the probable formation.

14.   The method of Claim 12, wherein the objects are moving vehicles.

15.   The method of Claim 14, wherein the moving vehicles are ground vehicles.

16.   The method of Claim 12, wherein the set of formation templates comprises:

    a)   a wedge template;

    b)   an echelon template;

c)   a column template; and

d)   a vee template.

17.   The method of Claim 12, wherein the configurations for each of the formation templates are based on at least one parameter.

18.   The method of Claim 17, wherein the at least one parameter comprises at least one external parameter.

19.   The method of Claim 18, wherein the at least one external parameter comprises:

a)   position;

b)   orientation; and

c)   scale.

20.   The method of Claim 18, wherein the at least one parameter comprises at least one internal parameter.

21.   The method of Claim 12, wherein determining the probable formation results in a determination that there are a plurality of probable formations.

22.   The method of Claim 12, wherein determining the probable formation results in a determination that there are no probable formations.